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Factors Influencing the Protective Effect of Salivary Pellicle Against Dental Erosion: A Concise Review

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Abstract

Dental erosion is the irreversible loss of dental hard tissue caused by chemical processes without bacteria involvement. Dental erosion prevalence has increased due to extensive consumption of acidic foods and drinks or suffering from gastrointestinal diseases. Salivary pellicle acts as a physical barrier that impedes direct contact between the tooth surface and erosive acids. Furthermore, it is a selectively permeable membrane that controls the diffusion of erosive acids to the tooth surface. Therefore, salivary pellicle can protect the tooth surface from erosive demineralization. The protective effect of salivary pellicle depends on the intraoral location, tooth substrate, thickness, formation time, composition, the pH level of erosive acids, and exposure time. This concise review aimed to provide an overview on factors influencing the protective effect of salivary pellicle against dental erosion.

Keywords: dental erosion, erosive acids, protective effect, salivary pellicle